

直线运动 系统 智造商

LINEAR MOTION
SYSTEM INTELLIGENT
PRODUCTS
MANUFACTURER



FSL系列模组，稳定性好，结构紧凑，并且拥有全封闭式结构，防屑，负载强。适用一般环境。可单轴或多轴组合使用，方便搭配各行业所需的工件便成为最简单、实用的机械手臂。

FSL series module, good stability, compact structure, and has closed structure, anti chip, strong load, suitable for normal working environment, it is convenient to use single axis or multi-axis to assemble easy functional usage robotic arms for kinds of industries

最重负载

Maximum Load

100kg

最高速度

maximum speed

500mm/s

重复定位精度

Repeat positioning accuracy

±0.02mm

最长行程

Longest travel

1500mm

FSL系列 定制封闭式模组

CUSTOMIZED CLOSED MODULE

防护全面 通用性强

WEAR-RESISTANT AND DURABLE
SIMPLE STRUCTURE



本体宽度 30mm
width
最大行程 300mm
max stroke
最大负载 3kg
max payload



本体宽度 45mm
width
最大行程 1000mm
max stroke
最大负载 20kg
max payload



本体宽度 60mm
width
最大行程 1050mm
max stroke
最大负载 40kg
max payload



本体宽度 80mm
width
最大行程 1200mm
max stroke
最大负载 50kg
max payload



本体宽度 120mm
width
最大行程 1500mm
max stroke
最大负载 100kg
max payload

FSL30直线模组

FSL30 LINEAR GUIDE

Single rail
单轨有效行程[mm]
Effective Stroke 50~300垂直参考负载[kg]
Vertical reference Loading 1水平参考负载[kg]
Horizontal reference Loadings 3

FSL30 直线模组-型号表示方式

FSL30-ORDERING METHOD

※为标配电机

FSL30		10	E300	BC	B35
● 丝杆模组-FSL系列 Screw module - FSL series	● 导程 Lead	● 电机位置 Motor position	● 厂牌 Brand name		
型号 Model	本体宽 (mm) Wide(mm)	丝杆导程 screw lead	电机折向 Motor folding direction	步进电机 Stepping motor	
FSL30	30	04 4mm 12 12mm	BC 电机直连 Motor Exposed	※ B35 35X34一体式	
	● 有效行程 Effective trip	丝杆外径 Screw Outer Diameter	标准行程 Wide(mm)		
		Ø8	50-300		

一体 机 指 标		最小值 Min	典型值 Typ	最大值 Max	单位 Unit
	输入电压 Output Voltage	12	24	40	Vdc
	控制信号输入电流 Control Signal Input Current	7	10	16	mA
	步进脉冲频率 Stepper Pulse Frequency	0	-	200	Khz
	绝缘电阻 Insulation Resistance	50	10	16	MΩ

FSL30 直线模组-搭配表

FSL30-OPTIONAL ACCESSORIES

触摸屏 Touch screen	控制器 Controller	限位开关 Limit switch	直流电源型号 DC power model	驱动器型号 Drive model
TPC7062HW	FSC-2A FMC4030	FML-(NPN/PNP)	LRS-100-24 LRS-350-24	电机自带一体机 The motor comes with a built-in driver

FSL30 直线模组-技术参数

FSL30-TECHNICAL PARAMETER

TECHNICAL PARAMETER			重复定位精度[mm] Position Accuracy			±0.02									
			滚珠丝杆直径[mm] Ball Screw Diameter			φ8					φ8				
			滚珠丝杆导程[mm] Lead			4					12				
3534 一体机 stepper motor	水平	负载[kg] loadings	0.5	1.0	1.5	2.0	2.5	3.0	0.5	1.0	1.5	2.0	2.5	3.0	
		速度[mm/s] Speed	80	80	80	80	80	80	240	240	200	200	200	180	
	侧装	速度[mm/s] Speed	80	80					240	240					
		垂直	速度[mm/s] Speed	80	80					240	180				
	倒装	速度[mm/s] Speed	80	80					240	240					
		噪音noise[dB]		≤65											
	使用温度[°C] Operating temperature			-10°C——+50°C											

加减速时间 0.5S Acceleration and deceleration time 0.5S

FSL30 直线模组-尺寸图

FSL30-DIMENSIONAL DRAWING

BC 电机直连 MOTOR EXPOSED															
行程[mm] Stroke		50	100	150	200	250	300								
模组总长[mm] Linear Guide Total Length		193	243	293	343	393	443								
重量[kg] Weight		0.45	0.55	0.65	0.75	0.85	0.95								

备注：螺母安装数量 会以长度不同而变化，以实际为准。

The installation length of nut shall be subject to the actual situation

FSL45直线模组

FSL45 LINEAR GUIDE

有效行程[mm]
Effective Stroke 50~1000垂直参考负载[kg]
Vertical reference Loading 10水平参考负载[kg]
Horizontal reference Loadings 20

FSL45 直线模组-型号表示方式

FSL45-ORDERING METHOD

※为标配电机

FSL45	C7	10	E300	BC	B57
丝杆模组-FSK系列 Screw module - FSK series 型号 Model FSL45 本体宽 (mm) Wide(mm) 45	导程 Lead 丝杆导程 screw lead 10 10mm	电机位置 Motor position 电机折向 Motor folding direction BC 电机直连 Motor Exposed	厂牌 Brand name P松下 T台达 Y安川 M三菱	伺服电机 Servo motor P松下 40:400W	步进电机 Stepping motor ※ B57 57X84一体式
重复定位精度 Repeated Positioning Accuracy 丝杆精度 Screw accuracy C7 ±0.02	有效行程 Effective trip 丝杆外径 Screw Outer Diameter Ø16 标准行程 Wide(mm) 50-1000				

一体电机 Stepping motor		最小值 Min	典型值 Typ	最大值 Max	单位 Unit
输出电流 (峰值) Output Current (Peak)		0.1	-	5.6	A
输出电压 (直流) Output Voltage (DC)		15	24	50	Vdc
控制信号输入电流 Control Signal Input Current		6	10	16	mA
控制信号输入电流 Control Signal Input Current		-	5	-	Vdc

FSL45 直线模组-搭配表

FSL45-OPTIONAL ACCESSORIES

触摸屏 Touch screen	控制器 Controller	限位开关 Limit switch	直流电源型号 DC power model	驱动器型号 Drive model
TPC7062HW	FSC-2A	SN04-N	PMT-24V350W	电机自带一体机 The motor comes with a built-in driver
	FMC4030	FML-(NPN/PNP)	PMT-24V100W	
			PMT-24V50W	

FSL45 直线模组-技术参数

FSL45-TECHNICAL PARAMETER

TECHNICAL PARAMETER	重复定位精度[mm] Position Accuracy		±0.02				
	滚珠丝杆直径[mm] Ball Screw Diameter		φ16				
	滚珠丝杆导程[mm] Lead		10				
	5784 一体机 stepper motor	水平	负载[kg] loadings	5	10	15	20
			速度[mm/s] Speed	200	200	200	200
		侧装	速度[mm/s] Speed	150	100		
			垂直	速度[mm/s] Speed	100		
		倒装	速度[mm/s] Speed	200	200		
			噪音noise[dB]		≤65		
		400W 伺服 AC Servo Motor	水平	负载[kg] loadings	5	10	15
	速度[mm/s] Speed			400	400	400	400
	侧装		速度[mm/s] Speed	400	400		
			垂直	速度[mm/s] Speed	400		
	倒装		速度[mm/s] Speed	400	400		
			噪音noise[dB]		≤65		
	使用温度[°C] Operating temperature		-10℃—+50℃				

加减速时间 0.5S Acceleration and deceleration time 0.5S

FSL45 直线模组-尺寸图

FSL45-DIMENSIONAL DRAWING

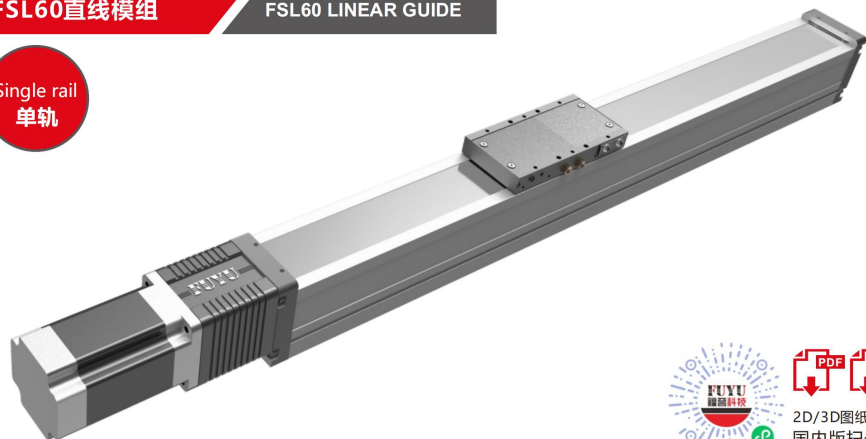
BC 电机直连 MOTOR EXPOSED															
行程[mm] Stroke	50	100	150	200	250	300	350	400	450	500	600	700	800	900	1000
模组总长[mm] Linear Guide Total Length	385	435	485	535	585	635	685	735	785	835	935	1035	1135	1235	1335
重量[kg] Weight	2.56	2.83	3.01	3.19	3.38	3.56	3.74	3.92	4.11	4.29	4.67	5.04	5.42	5.8	6.12
	381	431	481	531	581	631	645	731	781	831	931	1031	1131	1231	1331
	2.66	2.84	3.02	3.2	3.39	3.57	3.75	3.93	4.12	4.3	4.68	5.05	5.43	5.81	6.15

备注：螺母安装数量 会以长度不同而变化，以实际为准。

The installation length of nut shall be subject to the actual situation

FSL60直线模组

FSL60 LINEAR GUIDE

Single rail
单轨有效行程[mm]
Effective Stroke 50~1050垂直参考负载[kg]
Vertical reference Loading 20水平参考负载[kg]
Horizontal reference Loadings 40

FSL60 直线模组-型号表示方式

FSL60-ORDERING METHOD

※为标配电机

FSL60	C7	10	E300	BC	B60	S
丝杆模组-FSL系列 Screw module - FSL series 型号 Model FSL60 本体宽 (mm) Wide(mm) 60 重复定位精度 Repeated Positioning Accuracy 丝杆精度 Screw accuracy C7 ±0.02	导程 Lead 丝杆导程 screw lead 05 5mm 10 10mm 20 20mm 有效行程 Effective trip 丝杆外径 Screw Outer Diameter Ø16 标准行程 Wide(mm) 50-1050	电机位置 Motor position 电机折向 Motor folding direction BC 电机直连 Motor Exposed BL 电机左折 Motor Left Side BR 电机右折 Motor Right Side BD 电机下折 Motor Down Side	厂牌 Brand name 伺服电机 Servo motor P松下 20:200W T台达 40:400W Y安川 M三菱 C国产 步进电机 Stepping motor ※ B60 60X102 刹车 brake 无刹车不表示 Extra Enquiry if Need Brake			

FSL60 直线模组-搭配表

FSL60-OPTIONAL ACCESSORIES

触摸屏 Touch screen	控制器 Controller	限位开关 Limit switch	直流电源型号 DC power model	驱动器型号 Drive model
TPC7062HW	FSC-2A	SN04-N(NPN.NO)	PMT-24V350W	FMDD50D40NOM
	FMC4030	FML-(NPN/PNP)	LRS-350-24	

FSL60 直线模组-技术参数

FSL60-TECHNICAL PARAMETER

TECHNICAL PARAMETER	重复定位精度[mm] Position Accuracy			±0.02																													
	滚珠丝杆直径[mm] Ball Screw Diameter			φ16								φ16								φ16													
	滚珠丝杆导程[mm] Lead			5								10								20													
	60102 步进电机 stepper motor	水平	负载[kg] loadings	10	15	20	25	30	35	40	10	15	20	25	30	35	40	10	15	20	25	30	35	40									
			速度[mm/s] Speed	100	100	100	100	100	100	100	200	200	200	200	200	180	180	300	300	250	220	200	180	180									
		侧装	速度[mm/s] Speed	80	80									180	180									220	200								
			速度[mm/s] Speed	80	80	50									180	180	100									300	300	150					
		倒装	速度[mm/s] Speed	80	80									180	180									300	300								
	噪音noise[dB]			≤70																													
	400W 伺服电机 AC Servo Motor	水平	负载[kg] loadings	10	15	20	25	30	35	40	10	15	20	25	30	35	40	10	15	20	25	30	35	40									
速度[mm/s] Speed			200	200	200	200	200	200	200	400	400	400	400	400	400	400	400	400	400	400	400	400	400										
垂直		速度[mm/s] Speed	150	120	100									300	250	200									330	300	250						
		速度[mm/s] Speed	180	150									300	250									360	320									
倒装		速度[mm/s] Speed	180	150									300	250									360	320									
噪音noise[dB]			≤70																														
使用温度[°C] Operating temperature			-20℃—+50℃																														

加减速时间 0.5S Acceleration and deceleration time 0.5S

FSL60 直线模组-尺寸图

FSL60-DIMENSIONAL DRAWING

BC 电机直连 MOTOR EXPOSED																	
行程[mm] Stroke		50	100	150	200	250	300	350	400	450	500	600	700	800	900	1050	
模组总长[mm] Linear Guide Total Length		382	432	482	532	582	632	682	732	782	832	932	1032	1132	1232	1382	
重量[kg] Weight		383	433	483	533	583	633	683	733	783	833	933	1033	1133	1233	1383	
400W伺服电机 AC Servo Motor		3.1	3.4	3.7	4	4.3	4.6	4.9	5.2	5.5	5.8	6.4	7.0	7.6	8.5	9.1	

备注：螺母安装数量 会以长度不同而变化，以实际为准。

The installation length of nut shall be subject to the actual situation

FSL80 LINEAR GUIDE

水平参考负载[kg] 50
Horizontal reference loadings

FSL80-ORDERING METHOD

※为标配电机

FSL80-OPTIONAL ACCESSORIES

触摸屏 Touch screen	控制器 Controller	限位开关 Limit switch	直流电源型号 DC power model	驱动器型号 Drive model
TPC7062HW	FSC-2A	SN04-N(NPN.NO)	PMT-24V350W	FMDD50D40NOM
	FMC4030	FML-(NPN/PNP)	LRS-350-24	FMDT240A52NOM

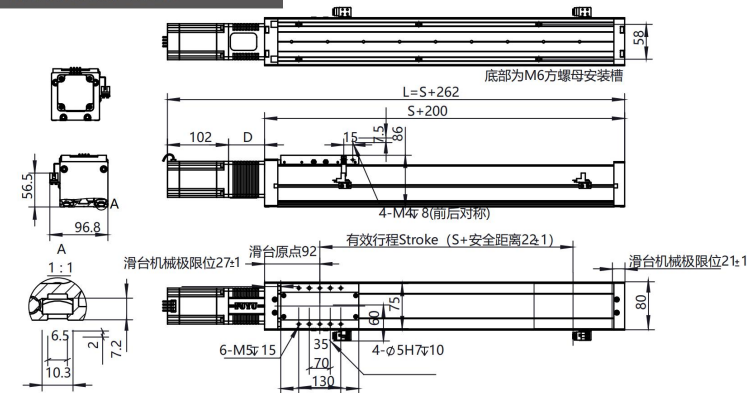
FSL80 TECHNICAL PARAMETER

TECHNICAL PARAMETER

重复定位精度[mm] Position Accuracy			±0.02										
滚珠丝杆直径[mm] Ball Screw Diameter			φ16										
滚珠丝杆导程[mm] Lead			10										
60102 步进电机 stepper motor	水平	负载[kg] loadings	5	10	15	20	25	30	35	40	45	50	
		速度[mm/s] Speed	200	200	200	200	200	200	180	180	100	100	
	侧装	速度[mm/s] Speed	200	200	200	180							
	垂直	速度[mm/s] Speed	180	180	180	160	100	80					
	倒装	速度[mm/s] Speed	200	200	200	180							
	噪音noise[dB]		≤75										
400W 伺服电机 AC Servo Motor	水平	负载[kg] loadings	5	10	15	20	25	30	35	40	45	50	
		速度[mm/s] Speed	400	400	400	400	400	400	400	380	380	380	
	侧装	速度[mm/s] Speed	400	400	400	380							
	垂直	速度[mm/s] Speed	400	400	400	350	350	350					
	倒装	速度[mm/s] Speed	400	400	400	380							
	噪音noise[dB]		≤75										
使用温度[°C] Operating temperature			-20°C——+50°C										

加减速时间 0.5S Acceleration and deceleration time 0.5S

FSL80-DIMENSIONAL DRAWING



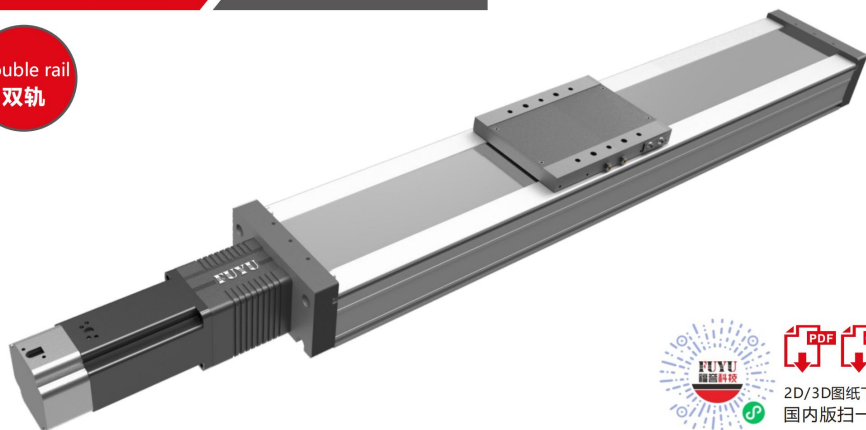
行程(mm) Stroke		50	100	150	200	250	300	400	500	600	700	800	900	1000	1100	1200
模切总长(mm) Linear die Total Length	60102步进电机 Stepper Motor	312	362	412	462	512	562	662	762	862	962	1062	1162	1262	1362	1462
		3.8	4.1	4.4	4.7	5	5.3	5.9	6.5	7.1	7.7	8.3	8.9	9.5	10.1	10.7
重量(kg) Weight	400W伺服电机 AC Servo Motor	418	463	513	563	613	663	763	863	963	1063	1163	1263	1363	1463	1563
		3.8	4.1	4.4	4.7	5	5.3	5.9	6.5	7.1	7.7	8.3	8.9	9.5	10.1	10.7

备注：螺母安装数量会以长度不同而变化，以实际为准。

The installation length of nut shall be subject to the actual situation

FSL120直线模组

FSL120 LINEAR GUIDE



2D/3D图纸下载
国内版扫一扫

有效行程[mm]
Effective Stroke 50~1500

垂直参考负载[kg]
Vertical reference Loading

水平参考负载[kg] 100
Horizontal reference Loadings

FSL120 直线模组-型号表示方式

FSL120-ORDERING METHOD

※为标配电机

FSL120
Screw module - FSL series

型号 Model	本体宽 (mm) Wide(mm)
FSL120	120

C7
丝杆精度
Screw accuracy

型号 Model	精度 Accuracy
C7	±0.02

E300
电机位置
Motor position

电机折向 Motor folding direction		
BC	电机直连	Motor Exposed
BL	电机左折	Motor Left Side
BR	电机右折	Motor Right Side
BD	电机下折	Motor Down Side

B86
伺服电机
Servo motor

伺服电机 Servo motor	
P松下	40:400W
T台达	75:750W
Y安川	
M三菱	
C国产	

S
步进电机
Stepping motor

步进电机 Stepping motor	
B86	86X98
	※ 86X128

刹车
Extra Enquiry If Need Brake

FSL120 直线模组-搭配表

FSL120-OPTIONAL ACCESSORIES

触摸屏 Touch screen	控制器 Controller	限位开关 Limit switch	直流电源型号 DC power model	驱动器型号 Drive model
TPC7062HW	FSC-2A	SN04-N(NPN.NO)	PMT-24V350W	FMDT240A52NOM
	FMC4030	FML-(NPN/PNP)	LRS-350-24	

FSL120 直线模组-技术参数

FSL120-TECHNICAL PARAMETER

TECHNICAL PARAMETER	重复定位精度[mm] Position Accuracy			±0.02																													
	滚珠丝杆直径[mm] Ball Screw Diameter			φ16/20																													
	滚珠丝杆导程[mm] Lead			05														10															
	86128 步进电机 stepper motor	水平	负载[kg] loadings	10	20	30	40	50	60	70	80	90	100	10	20	30	40	50	60	70	80	90	100										
			速度[mm/s] Speed	100	100	100	100	100	100	100	80	80	200	200	200	200	200	200	200	200	160	160											
		侧装	速度[mm/s] Speed	100	100	100	100											200	200	200	200												
		垂直	速度[mm/s] Speed	100	100	100	100	90											200	200	200	200	180										
		倒装	速度[mm/s] Speed	100	100	100	100											200	200	200	200												
		噪音noise[dB]			≤75																												
	400W 伺服电机 AC Servo Motor	水平	负载[kg] loadings	10	20	30	40	50	60	70	80	90	100	10	20	30	40	50	60	70	80	90	100										
			速度[mm/s] Speed	200	200	200	200	200	200	200	200	200	400	400	400	400	400	400	400	400	400	400											
		侧装	速度[mm/s] Speed	200	200	200	200											400	400	400	400												
垂直		速度[mm/s] Speed	200	200	200	200	200											400	400	400	400	400											
倒装		速度[mm/s] Speed	200	200	200	200											400	400	400	400													
噪音noise[dB]			≤75																														
750W 伺服电机 AC Servo Motor	水平	负载[kg] loadings	10	20	30	40	50	60	70	80	90	100	10	20	30	40	50	60	70	80	90	100											
		速度[mm/s] Speed	250	250	250	250	250	250	250	250	250	500	500	500	500	500	500	500	500	500	500												
	侧装	速度[mm/s] Speed	250	250	250	250											500	500	500	500													
	垂直	速度[mm/s] Speed	250	250	250	250	250											500	500	500	500	480											
	倒装	速度[mm/s] Speed	250	250	250	250											500	500	500	500													
	噪音noise[dB]			≤75																													
使用温度[°C] Operating temperature			-20℃—+50℃																														

加减速时间 0.5S Acceleration and deceleration time 0.5S

丝杆导程20mm的参数请联系客服

Please contact customer service for the parameter of 20mm lead of the lead screw

CHINA•CHENGDU

FUYU WAS FOUNDED IN 2011

WE HAVE OBTAINED 113 PATENTS AND INDUSTRY CERTIFICATIONS.



SERVED MORE THAN 20,000+ CUSTOMERS WITH R&D
EXPERIENCE IN 12 MAJOR INDUSTRIAL AUTOMATION FIELDS
INCLUDING ELECTRONICS, MANUFACTURING
ENERGY, MEDICAL, ETC.

IN THE PAST 14 YEARS FUYU HAS HELPED

North America	9462
Europe	8439
Asia	4091
South America	1790
Australia	1278
Africa	511

It realizes intelligent upgrading and lean operation of manufacturing, promotes intelligent production line transformation and process innovation of enterprises. FUYU people try to create a brand new industry ecosystem covering teaching experiments, scientific research and study integration of industry, education and research.



14 YEARS OF QUALITY ASSURANCE FROM THE SOURCE
MANUFACTURER 5000 SQUARE METERS OF
MANUFACTURING BASE, MONTHLY PRODUCTION
CAPACITY>3000 PIECES



ACCUMULATED SALES EXCEEDING 130000 UNITS
CUSTOMER REPUTATION IS VISIBLE





twofouroh

★★★★★ **Very happy, working well on a wood carving CNC table**

Reviewed in the United States on April 20, 2025

Size: 600mm | Style: B57 | [Amazon Vine Customer Review of Free Product](#) (What's this?)

I am using this as part of a CNC table that does small engraving jobs. It is powerful enough to move the milling head quickly, and the belt is strong enough that the positioning errors are too tiny to notice when I run it bidirectional. The build quality is very good, and it was packaged very well in foam, so there was no damage to it even though UPS chucked it around and ruined the box. All the materials are high quality and the finish is retail grade, a looker for sure.

Love it!

Helpful

Report



Aaron

★★★★★ **Fantastic addition to my CNC machine**

Reviewed in the United States on April 16, 2025

Size: 400mm | Style: B57 | [Amazon Vine Customer Review of Free Product](#) (What's this?)

I needed this linear stage for my CNC workshop and I found its integration into my workflow seamless. I used it for intricate milling tasks and I like its consistent precision across multiple runs. I experimented with different speeds and I observed smooth transitions without any jitter. I relied on it for extended periods and it maintains accuracy under heavy use. I tested it with both lightweight and denser materials and it is versatile in handling diverse projects. I continue to use it regularly and its operates quietly.

Helpful

Report



David

★★★★★ **Much faster, almost as accurate as screw type actuators.**

Reviewed in the United States on March 6, 2025

Size: 400mm | Style: B57 | [Amazon Vine Customer Review of Free Product](#) (What's this?)

For a CNC machine I am building, I had to choose between belt driven and screw driven linear rails. With this product, the speed is about six times faster than screw driven positioning systems, but the accuracy is still quite good at 0.05mm. I don't know how this is achieved, presumably the belt is a very specific material for damping and lack of stretch.

The build quality appears to be good. If I run into any problems, of course I don't expect them, but I will update the review.

Helpful

Report



Dwight Bumgarner

★★★★★ **High quality and great value!**

Reviewed in the United States on February 24, 2025

Size: 600mm | Style: B57 | [Amazon Vine Customer Review of Free Product](#) (What's this?)

This is an excellent linear slider! It is very precise and well made. It even comes with mounting brackets made out of aluminum that are very sturdy. I plan to use it in combination with a robotic arm. Unfortunately it does not come with an encoder, however it would be relatively easy to add an encoder because the bearings attached to the belt have their centers exposed. A limit switch would work as well. Overall a great product!

Helpful

Report



felix

★★★★★ **Solid and works flawlessly**

Reviewed in the United States on March 26, 2025

Size: 200mm | Style: B57 | [Amazon Vine Customer Review of Free Product](#) (What's this?)

Very well built. Solid and works flawlessly. Sturdy, sold material. Drive is powerful but quiet. Good value.

WE GAVE UP MANY CUSTOMERS BECAUSE OF
THE PRICEBUT WE WELCOMED MORE
CUSTOMERS BECAUSE OFTHE QUALITY